

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-9. (Canceled)

10. (Currently amended) The switching regulator of claim 23 [9], wherein the pulse control circuit comprises an on-period setting comparator that compares with a second reference voltage a voltage corresponding both to a period elapsed after the rise of the output pulse of the flipflop and to an input voltage of the switching regulator, and the on-period is set by resetting the flipflop with an output of the on-period setting comparator.

11. (Currently amended) The switching regulator of claim 23 [9], wherein the control signal generating circuit further comprises a maximum on-period control circuit that sets a maximum on-period and that resets the flipflop when the maximum on-period elapses after the rise of the output pulse of the flip-flop, wherein the on-period of the output pulse of the flipflop is limited so as not to exceed the maximum on-period.

12. (Original) The switching regulator of claim 10, wherein the control signal generating circuit further comprises a maximum on-period control circuit that sets a maximum on-period and that resets the flipflop when the maximum on-period elapses after the rise of the output pulse of the flip-flop, wherein the on-period of the output pulse of the flipflop is limited so as not to exceed the maximum on-period.

13. (Original) The switching regulator of claim 11, wherein the control signal generating circuit further comprises a reset-preventing section that prevents an output of the pulse control circuit from resetting the flipflop if, when the predetermined on-period has elapsed after the rise

of the output pulse of the flipflop, the voltage based on the output voltage of the switching regulator is lower than the reference voltage.

14. (Original) The switching regulator of claim 12, wherein the control signal generating circuit further comprises a reset-preventing section that prevents an output of the pulse control circuit from resetting the flipflop if, when the predetermined on-period has elapsed after the rise of the output pulse of the flipflop, the voltage based on the output voltage of the switching regulator is lower than the reference voltage.

15. (Original) The switching regulator of claim 13, wherein the control signal generating circuit further comprises a set-preventing section that prevents an output of the comparator from setting the flipflop after the maximum on-period has elapsed after the rise of the output pulse of the flipflop until a predetermined period further elapses.

16. (Original) The switching regulator of claim 14, wherein the control signal generating circuit further comprises a set-preventing section that prevents an output of the comparator from setting the flipflop after the maximum on-period has elapsed after the rise of the output pulse of the flipflop until a predetermined period further elapses.

17. (Currently amended) The switching regulator of claim 23 [9], further comprising a resistor between the comparator and an output capacitor included in the DC-DC converter.

18. (Canceled)

19. (Currently amended) The switching regulator of claim 23 [18], wherein the driver circuit comprises an output terminal via which a signal based on an inverted signal of the control signal is outputted, the switching regulator further comprises a constant voltage source and a resistor that has one end thereof connected to the output terminal of the driver circuit via

which the signal based on the inverted signal of the control signal is outputted and that has another end thereof connected to an output terminal of the constant voltage source, and a voltage at a node between the constant voltage source and the resistor is the reference voltage.

20. (Currently amended) The switching regulator of claim 23 [18], further comprising a constant voltage source and a resistor that has one end thereof connected to an inverting output terminal of the flipflop and that has another end thereof connected to an output terminal of the constant voltage source, wherein a voltage at a node between the constant voltage source and the resistor is the reference voltage.

21. (Currently amended) The switching regulator of claim 23 [18], further comprising a constant voltage source, a variable current source that varies a current according to a signal based on the control signal, and a resistor that has one end thereof connected to the constant voltage source and that has another end thereof connected to the variable current source, wherein a voltage at node between the resistor and the variable current source is the reference voltage.

22. (New) A switching regulator comprising:  
a DC-DC converter that includes a switching device and that is arranged to provide an output voltage;  
a control signal generating circuit arranged to generate a pulse signal as a control signal corresponding to the output voltage of the DC-DC converter and arranged to generate a reference voltage; and  
a driver circuit arranged to drive the switching device based on the control signal;  
wherein the reference voltage varies with the pulse signal of the control signal generating circuit, and is in substantially opposite phase to the output voltage of the DC-DC converter.

23. (New) The switching regulator of claim 22 wherein the control signal generating circuit comprises:

- a comparator to compare a voltage based on the output voltage of the DC-DC converter with the reference voltage;

- a flip-flop set arranged to be set by an output of the comparator; and

- a pulse control circuit arranged to reset the flip-flop when a predetermined on-period elapses after a rise of an output pulse of the flip-flop;

- wherein the control signal generating circuit is arranged to provide the output pulse of the flip-flop as the control signal for the switching device.